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IS 8809:1991

भारतीय मानक

पोतिनर्माण — पोत खिड़िकयों के गैस्केट — विशिष्ट

(पहला पुनरीक्षण)

Indian Standard

SHIPBUILDING — GASKETS FOR SHIP'S WINDOWS — SPECIFICATION

(First Revision)

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards after the draft finalized by the Shipbuilding Sectional Committee, had been approved by the Transport Engineering Divisional Council.

This standard was first published in 1978. This revision has been undertaken to include Type C gasket for use with rectangular windows only. The other salient features of the revision are:

- a) Inclusion of material hardness of 40 \pm 5 IHRD,
- b) Inclusion of temperature range 20°C up to + 70°C, and
- c) Deletion of moulded shape for gaskets.

In the preparation of this standard assistance has been derived from ISO 3902-1990 'Shipbuilding and marine structures — Gaskets for rectangular windows and side scuttles' issued by International Organization for Standardisation (ISO).

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

SHIPBUILDING — GASKETS FOR SHIP'S WINDOWS — SPECIFICATION

(First Revision)

1 SCOPE

This Indian Standards specifies dimensions and material of gaskets used for ensuring watertightness between the main components such as main frame, glassholder, deadlight of ships round windows conforming to IS 5574 (Part 1): 1989 "Shipbuilding—Round Windows (side scuttles): Part 1 General requirements (first revison)" and ships' rectangular windows conforming to IS 8886 (Part 2): 1978 "Ships' ordinary rectangular windows: Part 2 General requirements".

2 REFERENCES

The following Indian Standards are necessary adjuncts to this Standard.

IS Title

2500 (Part 1): Sampling inspection 1973 tables: Part 1 Inspection

by attributes and by count of defects (first revision)

3400 (Part 2): Methods of test for vul-1980 canized rubbers: Part 2

Hardness

3400 (Part 20): Methods of test for vul-1977 canized rubbers: Part 20

Resistance to ozone (first

revision)

3 TYPES

- 3.1 The gaskets shall be of three types as shown in Fig. 1.
- 3.2 Types A and B shall be used for round and rectangular windows, whereas type C shall be used with rectangular windows only.

4 DIMENSIONS

The cross-sectional dimensions of the three types shall be as given in Fig. 1.

5 MATERIAL

5.1 The gaskets shall be made from synthetic rubber resistant to sea water and ozone, with a hardness of 40 ± 5 IRHD and working temperatures from -20° C up to $+70^{\circ}$ C.

6 SAMPLING

Unless otherwise agreed to between the purchaser

and the supplier, the procedure given in IS 2500 (Part 1): 1973 shall be followed. For this purpose, the Inspection Level III and AQL value of 2.5 percent as per IS 2500 (Part 1): 1973 shall be taken.

7 TESTS

7.1 Hardness Test

7.1.1 The hardness of material shall be measured in accordance with IS 3400 (Part 2): 1980.

7.2 Water Absorption Test

7.2.1 Procedure

Cut a piece of about 3 g from the finished gasket. Weigh it accurately. Put in 150 ml of sea water and let it remain there for 168 hours. Remove the piece and weigh again after surface water layer is dried up.

7.2.2 Calculation

Water absorption, percent by mass $= \frac{W_2 - W_1}{W_1} \times 100$

where

 W_1 = original mass in grams of test piece before immersion in sea water, and

 W_2 = mass in grams of the test piece after immersion in sea water.

7.2.3 The resistance of rubber gaskets to sea water shall be ascertained by water absorption test. Gaskets shall not absorb more than 10 percent by weight.

7.3 Resistance to Ozone

7.3.1 The resistance of rubber gaskets to ozone shall be ascertained in accordance with IS 3400 (Part 20): 1977.

8 DESIGNATION

8.1 Gaskets conforming to this standard shall be designated with the type of gasket and the number of this standard.

Example:

Type A gasket shall be designated as:

Gasket IS 8809 A

8.1.1 Where gaskets of specific length are to be designated the length in metres is to be added to the above designation.

Example:

Type A gasket 100 m long shall be designated as Gasket IS 8809 A 100

9 PACKING AND MARKING

9.1 Packing

The gaskets shall be packed as agreed to between the purchaser and the supplier.

9.2 Marking

The gaskets shall be marked at suitable lengths with the following:

- a) Indication of the source of manufacturer or trade-mark,
- b) Type and designation, and
- c) Date of manufacture.

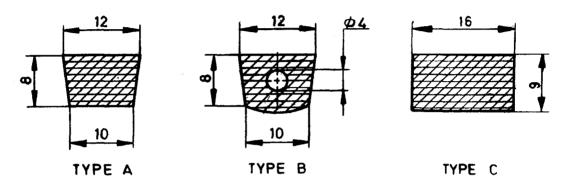


FIG. 1 CROSS-SECTIONAL DIMENSIONS OF GASKETS

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